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## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

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(currently amended) A compound of formula (Ia): 1.

$$R^1$$
 $R^4$ 
 $R^3$ 
 $R^3$ 

or a pharmaceutically acceptable salt, hydrate, tautomer or solvate thereof, wherein:

X is O-or-S;

R<sup>1</sup> is selected from the group consisting of

where R<sup>22</sup> is independently selected from the group consisting of: (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, (C3-C10)cycloalkyl, (C5-C10)aryl, (C1-C6)alkylaryl, amino, carbonyl, carboxyl, (C5-C10)heteroaryl,

(C<sub>5</sub>-C<sub>10</sub>)heterocyclyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, halo, hydroxyl, and (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)ester, and where alkyl, alkenyl, alkynyl, cycloalkyl, aryl, amino, heteroaryl, heterocyclyl, and alkoxy of R<sup>2a</sup> is optionally substituted by at least one moiety independently selected from the group consisting of halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl, phenyl, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl, (C<sub>5</sub>-C<sub>10</sub>)heterocyclic, formyl, NC-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-,

and

\_4.

phenyl-(C=O)-, HO-(C=O)-, (C1-C6)alkyl-O-(C=O)-, (C1-C6)alkyl-NH-(C=O)-, ((C1-C6)alkyl)2-N-(C=O)-, phenyl-NH-(C=O)-, phenyl- $[((C_1-C_6)alkyl)-N]-(C=O)-$ , O<sub>2</sub>N-, amino, (C<sub>1</sub>- $C_6$ ) alkylamino,  $((C_1-C_6)$  alkyl)2-amino,  $(C_1-C_6)$  alkyl-(C=O)-NH-,  $(C_1-C_6)$  alkyl-(C=O)- $[((C_1-C_6)$  alkyl-(C=O)- $((C_1-C_6)$  alkyl-(C= $C_6$ )alkyl)-N]-, phenyl-(C=O)-NH-, phenyl-(C=O)-[(( $C_1$ - $C_6$ )alkyl)-N]-,  $H_2$ N-(C=O)-NH-, ( $C_1$ - $C_6$ )alkyl-HN-(C=O)-NH-, (( $C_1$ - $C_6$ )alkyl)<sub>2</sub>N-(C=O)-NH-, ( $C_1$ - $C_6$ )alkyl-HN-(C=O)-[(( $C_1$ - $C_6$ )alkyl)-N]-, (( $C_1$ - $C_6$ )alkyl)<sub>2</sub>N-(C=O)-[ ( $C_1$ - $C_6$ )alkyl-N]-, phenyl-HN-(C=O)-NH-, (phenyl)<sub>2</sub>N-(C=O)-NH-, phenyl-HN-(C=O)- $[((C_1-C_6)a!kyl)-N]$ -,  $(phenyl-)_2N-(C=O)-[((C_1-C_6)alkyl)-N]-, (C_1-C_6)alkyl-O-(C=O)-NH-,$  $(C_1-C_6)$ alkyl-O-(C=O)- $[((C_1-C_6)$ alkyl)-N]-, phenyl-O-(C=O)-NH-, phenyl-O-(C=O)-[(alkyl)-N]-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-SO<sub>2</sub>NH-, phenyl-SO<sub>2</sub>NH-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-SO<sub>2</sub>-, phenyl-SO<sub>2</sub>-, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkoxy, phenoxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-O-.  $(C_1-C_6)$ ester- $(C_1-C_6)$ alkyl-O-, phenyl-(C=O)-O-,  $H_2N$ -(C=O)-O-,  $(C_1-C_6)$ alkyl-HN-(C=O)-O-,  $((C_1-C_6)alkyl)_2N-(C=O)-O-$ , phenyl-HN-(C=O)-O-, and (phenyl)<sub>2</sub>N-(C=O)-O-; wherein R<sup>1</sup> can optionally be further independently substituted with at least one moiety independently selected from the group consisting of: carbonyl, halo, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, perhalo( $C_1$ - $C_6$ )alkyl, perhalo( $C_1$ - $C_6$ )alkoxy, ( $C_1$ - $C_6$ )alkyl, ( $C_2$ - $C_6$ )alkenyl, ( $C_2$ - $C_6$ )alkynyl, hydroxy, oxo, mercapto,  $(C_1-C_6)$ alkylthio,  $(C_1-C_6)$ alkoxy,  $(C_5-C_{10})$ aryl, ef  $(C_5-C_{10})$ heteroaryl,  $(C_5-C_{10})$  $C_{10}$ )aryloxy,  $\Theta_r$  ( $C_5$ - $C_{10}$ )heteroaryloxy, ( $C_5$ - $C_{10}$ )ar( $C_1$ - $C_6$ )alkyl,  $\Theta_r$  ( $C_5$ - $C_{10}$ )heteroar( $C_1$ - $C_6$ )alkyl,  $(C_5-C_{10})$ ar $(C_1-C_6)$ alkoxy, ef  $(C_5-C_{10})$ heteroar $(C_1-C_6)$ alkoxy, HO-(C=O)-, ester, amido, ether, amino, amino( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkylamino( $C_1$ - $C_6$ )alkyl, di( $C_1$ - $C_6$ )alkylamino( $C_1$ - $C_6$ )alkyl,  $(C_5-C_{10})$ heterocyclyl $(C_1-C_6)$ alkyl,  $(C_1-C_6)$ alkyl-, and di $(C_1-C_6)$ alkylamino, cyano, nitro, carbamoyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylaminocarbonyl, di(C1-C6)alkylaminocarbonyl, (C5-C10)arylcarbonyl, (C5-C10)aryloxycarbonyl,  $(C_1-C_6)$ alkylsulfonyl, and  $(C_5-C_{10})$ arylsulfonyl;

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C<sub>6</sub>)alkyl-SO<sub>2</sub>-NH-, amino(C=O)-, aminoO<sub>2</sub>S-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-NH-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-[((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-, phenyl-(C=O)-NH-, phenyl-(C=O)-[((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-, phenyl-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl-(C=O)-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-(C=O)-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-(C=O)-, [(C<sub>1</sub>-C<sub>6</sub>)alkyl]<sub>2</sub>-N-(C=O)-, phenyl-NH-(C=O)-, phenyl-[((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl-NH-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heteroary

where alkyl, alkenyl, alkynyl, phenyl, heteroaryl, heterocyclic, cycloalkyl, alkoxy, phenoxy, amino of  $\mathbb{R}^3$  is optionally substituted by at least one substituent independently selected from  $(C_1-C_6)$ alkyl,  $(C_1-C_6)$ alkoxy, halo $(C_1-C_6)$ alkyl, halo,  $H_2N$ -,  $Ph(CH_2)_{1-6}HN$ -, and  $(C_1-C_6)$ alkylHN-;

s is an integer from one to five;

R<sup>4</sup> is independently selected from the group consisting of: hydrogen, halo, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl, phenyl, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl, (C<sub>5</sub>-C<sub>10</sub>)heterocyclic, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkoxy, phenoxy, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl-O-, (C<sub>5</sub>-C<sub>10</sub>)heterocyclic-O-, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl-O-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-S-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-SO<sub>2</sub>-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-SO<sub>2</sub>-, O<sub>2</sub>N-, NC-, amino, Ph(CH<sub>2</sub>)<sub>1-6</sub>HN-, (C<sub>1</sub>-C<sub>6</sub>)alkylHN-, (C<sub>1</sub>-C<sub>6</sub>)alkylamino, [(C<sub>1</sub>-C<sub>6</sub>)alkyl]<sub>2</sub>-amino, (C<sub>1</sub>-C<sub>6</sub>)alkyl-SO<sub>2</sub>-NH-, amino(C=O)-, aminoO<sub>2</sub>S-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-NH-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N-, phenyl-(C=O)-((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-, phenyl-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heterocyclic-(C=O)-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-(C=O)-, ((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>-N-(C=O)-, phenyl-NH-(C=O)-, phenyl-(C=O)-, (C<sub>3</sub>-C<sub>10</sub>)heteroaryl-NH-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heterocyclic-NH-(C=O)-, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl-NH-(C=O)-, (C<sub>5</sub>-C<sub>10</sub>)heterocyclic-NH-(C=O)-, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl-NH-(C=O)- and (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-O-;

where alkyl, alkenyl, alkynyl, phenyl, heteroaryl, heterocyclic, cycloalkyl, alkoxy, phenoxy, amino of  $\mathbb{R}^4$  is optionally substituted by at least one substituent independently selected from the group consisting of  $(C_1-C_6)$ alkyl,  $(C_1-C_6)$ alkoxy, halo $(C_1-C_6)$ alkyl, halo,  $H_2N_-$ ,  $Ph(CH_2)_{1-6}HN_-$ ,  $(C_1-C_6)$ alkyl $HN_-$ ,  $(C_5-C_{10})$ heteroaryl and  $(C_5-C_{10})$ heterocyclyl;

with the proviso that when R<sup>4</sup> is a substituted phenyl moiety, then (a) R<sup>1</sup> is not naphthyl, phenyl or anthracenyl and (b) if R<sup>1</sup> is a phenyl fused with an aromatic or non-aromatic cyclic

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ring of 5-7 members wherein said cyclic ring optionally contains up to three heteroatoms independently selected from N, O and S, then the fused cyclic ring of said R<sup>1</sup> moiety is substituted;

with the proviso that when  $R^4$  is  $NH_2$  and X is S, then  $R^1$  is not an amino-substituted pyridyl or pyrimidinyl moiety; and

with the proviso that when in formula (Ia) R<sup>4</sup> is CH<sub>3</sub> and X is S, R<sup>1</sup> is not a 3,4-dimethoxy substituted phenyl moiety.

2. (original) A compound of claim 1, wherein R<sup>1</sup> is

3. (original) A compound of claim 1, wherein R<sup>1</sup> is

4. (currently amended) A compound of claim 1, wherein R<sup>1</sup> is

5. (original) A compound of claim 1, wherein R<sup>1</sup> is

6. (original) A compound of claim 1, wherein R<sup>1</sup> is

7. (original) A compound of claim 1, wherein R<sup>1</sup> is

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8. (original) A compound of claim 1, wherein R<sup>1</sup> is

- 9. (canceled).
- 10. (original) A compound of claim 1, wherein X is S; s is one to two;  $\mathbb{R}^3$  is hydrogen or  $(C_1-C_6)$ alkyl; and  $\mathbb{R}^4$  is H,  $(C_1-C_6)$ alkyl, or amino.
- 11. (previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

12-13. (cancelled)

14. (currently amended) A compound selected from the groups consisting of

2 (5 Benze[1,3]dioxel 5 yl exazel 4 yl) 6 methyl pyridine;

2-(5-Benzo[1,3]dioxol-5-yl-oxazol-4-yl)-pyridine;

2 (5 Benzo[1,3]dioxol 5 yl oxazol 4 yl) 6 methoxy pyridine;

2-(5-Benzo[1,3]dioxol-5-yl-oxazol-4-yl)-6-trifluoromothyl-pyridine;

2 Methyl 5 [4 (6 methyl pyridin 2 yl) oxazol 5-yl]-2H-benzotriazolo;

4-[4-(6-Methyl pyridin 2-yl) exazel 5-yl] quineline;

1-Methyl 6-[4-(6-methyl-pyridin 2-yl) exazel 5-yl] 1H benzetriazele;

6 (4 Pyridin 2 yl oxazol 5 yl) quinoxaline;

6-[4-(6-Methyl-pyridin 2-yl) exazel 5-yl] quinoxaline;

6-[4-(6-Methyl pyridin 2 yl) exazel 5 yl] quinoline;

6 (4 pyridin 2 yl oxazol 5-yl) quinoline;

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2-(5-Benzo[1,3]dioxol 5-yl-oxazol-4-yl) 6-ethyl-pyridine;
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- 2 (5 Benzo[1,3]dioxol 5 yl oxazol 4 yl) 6 propyl pyridine;
- 6 [4 (6 Methyl pyridin-2 yl) exazel 5 yl] benzethiazele,
- 2-(4-Benzo[1,3]dioxol-5-yl-oxazol-5-yl)-6-methyl-pyridine;
- 4-[5-(6-Methyl-pyridin 2-yl) oxazol 4-yl] quinolino;
- 1 Methyl 6 [5 (6 methyl pyridin 2 yl) exazel 4 yl] 1H benzetriazele;
- 2 Methyl 5 [5 (6 methyl-pyridin 2 yl) exezel 4 yl] 2H benzetriazole;
- 6-[5-(6-Methyl-pyridin-2-yl)-exazel-4-yl]-quinoline;
- 6 [5-(6-Methyl pyridin 2 yl) exazel 4 yl] quinoxaline;
- 2 [5 (6 Methyl pyridin 2 yl) oxazol 4 yl] [1,5]naphthyridine;
- {4 [5 (6 Methyl pyridin 2 yl) exazel 4 yl] pyridin 2 yl}-phenyl-amine;
- 2 (4-Benzo[1,3]dioxol-5-yl-2-methyl-oxazol-5-yl) 6 methyl pyridine;
- 1-Methyl 6 [2 methyl 5 (6 methyl pyridin 2 yl) oxazol-4-yl]-1H-benzetriazole;
- 2 Methyl 5 [2 methyl 5 (6 methyl pyridin 2 yl) exazel 4 yl] 2H-benzetriazele;
- 6-[2-Methyl-5-(6-methyl-pyridin-2-yl)-oxazol-4-yl]-quinolino;
- 6 [2 Methyl 5 (6 methyl pyridin 2 yl) exazel 4-yl]-quinexaline;
- 2 [2 Methyl 5 (6 methyl pyridin 2 yl) exazel 4 yl] [1,5]naphthyridine;
- {4 [2 Methyl 5 (6 methyl pyridin 2 yl) exazel 4 yl] pyridin 2 yl} phenyl amine;
- 4-[2-Mothyl-5 (6-mothyl-pyridin 2-yl) exazol 4-yl] quinoline;
- 4-Benzo[1,3]dioxol-5-yl-5-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 4-(3-Methyl-3H-benzotriazol-5-yl)-5-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 4-(2-Methyl-2H-benzotriazol-5-yl)-5-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 5-(6-Methyl-pyridin-2-yl)-4-quinolin-6-yl-thiazol-2-ylamine;
- 5-(6-Methyl-pyridin-2-yl)-4-quinoxalin-6-yl-thiazol-2-ylamine;
- 5-(6-Methyl-pyridin-2-yl)-4-[1,5]naphthyridin-2-yl-thiazol-2-ylamine;
- {4 [2 Amino 5 (6 methyl-pyridin 2 yl) thiazol 4 yl] pyridin 2 yl} -phonyl-amino;
- 5-(6-Methyl-pyridin-2-yl)-4-quinolin-4-yl-thiazol-2-ylamine;
- 4-(6-Methyl-pyridin-2-yl)-5-quinolin-6-yl-thiazol-2-ylamine;
- 5-(3-Methyl-3H-benzotriazol-5-yl)-4-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 5-(2-Methyl-2H-benzotriazol-5-yl)-4-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;

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- 5-Benzo[1,3]dioxol-5-yl-4-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 4-(6-Methyl-pyridin-2-yl)-5-quinoxalin-6-yl-thiazol-2-ylamine;
- 4-(6-Methyl-pyridin-2-yl)-5-[1,5]naphthyridin-2-yl-thiazol-2-ylamine;
- {4 [2 Amino 4 (6 methyl pyridin 2 yl) thiazol 5 yl] pyridin 2 yl) phonyl amine;
- 4-(6-Methyl-pyridin-2-yl)-5-quinolin-4-yl-thiazol-2-ylamine;
- 6-[2-Methyl-4 (6 methyl pyridin 2 yl) exazel 5 yl] quineline:
- 1 Methyl 6 [2 methyl 4 (6 methyl pyridin 2 yl) oxazol 5 yl] 1H benzetriazolo;
- 2 Methyl 5 [2 methyl 4 (6 methyl pyridin 2 yl) exazel 5 yl] 2H-benzetriazele;
- 2 (5 Benzo[1,3]dioxol 5 yl 2 mothyl exezel 4 yl) 6 methyl pyridine;
- 6-[2-Methyl-4-(6-methyl-pyridin-2-yl)-exazel-5-yl]-quinexaline;
- 2 [2 Methyl 4 (6 methyl pyridin 2 yl) exazel 5 yl] [1,5]naphthyridine;
- {4-[2-Methyl-4-(6-methyl-pyridin-2-yl)-exazel-5-yl] pyridin-2-yl} phenyl-amine;
- 4 [2 Methyl 4 (6 methyl pyridin 2 yl) exazel 5 yl] quineline;
- 1-Methyl-6-[4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-1H-benzotriazole;
- 2-Methyl-5-[4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-2H-benzotriazole;
- 2-(5-Benzo[1,3]dioxol-5-yl-thiazol-4-yl)-6-methyl-pyridine;
- 6-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoxaline;
- 2-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-[1,5]naphthyridine;
- {4-[4-(6-Mothyl-pyridin-2-yl)-thiazol-5-yl]-pyridin-2-yl}-phenyl-amine;
- 4-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline;
- 6-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline;
- 1-Methyl-6-[5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-1H-benzotriazole;
- 2-Methyl-5-[5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-2H-benzotriazole;
- 2-(4-Benzo[1,3]dioxol-5-yl-thiazol-5-yl)-6-methyl-pyridine;
- 6-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoxaline;
- 2-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-[1,5]naphthyridine;
- {4 [5 (6 Methyl pyridin 2 yl)-thiazol-4-yl]-pyridin 2 yl} phenyl amine;
- 4-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline;
- 6-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline;
- 1-Methyl-6-[2-methyl-4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-1H-benzotriazole;

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- 2-Methyl-5-[2-methyl-4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-2H-benzotriazole;
- 2-(5-Benzo[1,3]dioxol-5-yl-2-methyl-thiazol-4-yl)-6-methyl- pyridine;
- 6-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoxaline;
- 2-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-[1,5]naphthyridine;
- {4 [2 methyl 4 (6 Methyl pyridin 2 yl) thiazol 5 yl]-pyridin 2-yl} phenyl amine;
- 4-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline;
- 6-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline;
- 1-Methyl-6-[2-methyl-5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-1H-benzotriazole;
- 2-Methyl-5-[2-methyl-5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-2H-benzotriazole;
- 2-(4-Benzo[1,3]dioxol-5-yl-2-methyl-thiazol-5-yl)-6-methyl-pyridine;
- 6-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoxaline;
- 2-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-[1,5]naphthyridine;
- {4-[2-methyl 5-(6-Mothyl pyridin 2-yl) thiazol 4-yl]-pyridin 2-yl) phonyl amine:
- 4-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline; and
- 6-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline; or a pharmaceutically acceptable salt thereof.
- 15. (previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 14 and a pharmaceutically acceptable carrier.
- 16. (canceled)
- 17. (canceled)
- 18. (currently amended) A compound of formula (Ib):

$$-12 R^1$$
 $X$ 
 $R^4$ 
 $(Ib)$ 

or a pharmaceutically acceptable salt, hydrate, tautomer or solvate thereof, wherein:

X is S;

R<sup>1</sup> is selected from the group consisting of

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where R<sup>2a</sup> is independently selected from the group consisting of: (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, (C3-C10)cycloalkyl, (C5-C10)aryl, (C1-C6)alkylaryl, amino, carbonyl, carboxyl, (C<sub>5</sub>-C<sub>10</sub>)heteroaryl, (C<sub>5</sub>-C<sub>10</sub>)heterocyclyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, halo, hydroxyl, and  $(C_1-C_6)$  alkoxy $(C_1-C_6)$  ester, and where alkyl, alkenyl, alkynyl, cycloalkyl, aryl, amino, heteroaryl, heterocyclyl, and alkoxy of R<sup>2a</sup> is optionally substituted by at least one moiety independently selected from the group consisting of halo, (C1-C6)alkyl, (C2-C6)alkenyl, (C2-C6)alkynyl, perhalo(C1-C6)alkyl, phenyl, (C3-C10)cycloalkyl, (C5-C10)heteroaryl, (C5-C<sub>10</sub>)heterocyclic, formyl, NC-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-, phenyl-(C=O)-, HO-(C=O)-, (C<sub>1</sub>- $C_6$ )alkyl-O-(C=O)-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-NH-(C=O)-, ((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>-N-(C=O)-, phenyl-NH-(C=O)-, phenyl- $[((C_1-C_6)alkyl)-N]-(C=O)-$ ,  $O_2N-$ , amino,  $(C_1-C_6)alkylamino$ ,  $((C_1-C_6)alkyl)_2$ -amino,  $(C_1-C_6)$ alkyl-(C=O)-NH-,  $(C_1-C_6)$ alkyl- $(C=O)-[((C_1-C_6)$ alkyl)-N]-, phenyl-(C=O)-NH-, phenyl-(C=O)-[((C1-C6)alkyl)-N]-,  $H_2N$ -(C=O)-NH-, (C1-C6)alkyl-HN-(C=O)-NH-, ((C1-C6)alkyl-HN-(C=O)-NH-, ((C1-C6)alkyl-HN-(C=O)-Alkyl-HN-(C=O)-Alkyl-HN-((C1-C6)alkyl-HN-(C=O)-Alkyl-HN-(C=O)-Alkyl-HN-((C1-C6)alkyl-HN-(C1-C6)alkyl-HN  $C_6$ )alkyl)<sub>2</sub>N-(C=O)-NH-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-HN-(C=O)-[((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-, ((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-, ((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]- $C_6$ )alkyl)<sub>2</sub>N-(C=O)-[ (C<sub>1</sub>-C<sub>6</sub>)alkyl-N]-, phenyl-HN-(C=O)-NH-, (phenyl)<sub>2</sub>N-(C=O)-NH-, C<sub>6</sub>)alkyl-O-(C=O)-NH-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-O-(C=O)-[((C<sub>1</sub>-C<sub>6</sub>)alkyl)-N]-, phenyl-O-(C=O)-NH-, phenyl-O-(C=O)-[(alkyl)-N]-. (C1-C6)alkyl-SO2NH-, phenyl-SO2NH-, (C1-C0)alkyl-SO2-,

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phenyl-SO<sub>2</sub>-, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkoxy, phenoxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl-(C=O)-O-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-O-, phenyl-(C=O)-O-, H<sub>2</sub>N-(C=O)-O-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-HN-(C=O)-O-, ((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>N-(C=O)-O-, phenyl-HN-(C=O)-O-, and (phenyl)<sub>2</sub>N-(C=O)-O-; wherein R<sup>1</sup> can optionally be further independently substituted with at least one moiety independently selected from the group consisting of: carbonyl, halo, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl, perhalo(C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, hydroxy, oxo, mereapto-, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>5</sub>-C<sub>10</sub>)aryl<sub>2</sub> or (C<sub>5</sub>-C<sub>10</sub>)heteroaryl, (C<sub>5</sub>-C<sub>10</sub>)aryloxy<sub>2</sub> or (C<sub>5</sub>-C<sub>10</sub>)heteroaryloxy, (C<sub>5</sub>-C<sub>10</sub>)ar(C<sub>1</sub>-C<sub>6</sub>)alkyl<sub>3</sub> or (C<sub>5</sub>-C<sub>10</sub>)heteroar(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>5</sub>-C<sub>10</sub>)ar(C<sub>1</sub>-C<sub>6</sub>)alkoxy<sub>2</sub>, or (C<sub>5</sub>-C<sub>10</sub>)heteroar(C<sub>1</sub>-C<sub>6</sub>)alkoxy, HO-(C=O)-, ester, amido, ether, amino, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl, di(C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, di(C<sub>1</sub>-C<sub>6</sub>)alkylamino, cyano, nitro, carbamoyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylaminocarbonyl, di(C<sub>1</sub>-C<sub>6</sub>)alkylaminocarbonyl, (C<sub>5</sub>-C<sub>10</sub>)arylcarbonyl, (C<sub>5</sub>-C<sub>10</sub>)aryloxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl, and (C<sub>5</sub>-C<sub>10</sub>)arylsulfonyl;

each  $R^3$  is independently selected from the group consisting of: hydrogen, halo, halo( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkyl, ( $C_2$ - $C_6$ )alkenyl, ( $C_2$ - $C_6$ )alkynyl, perhalo( $C_1$ - $C_6$ )alkyl, phenyl, ( $C_5$ - $C_{10}$ )heteroaryl, ( $C_5$ - $C_{10}$ )heteroacyclic, ( $C_3$ - $C_{10}$ )cycloalkyl, hydroxy, ( $C_1$ - $C_6$ )alkoxy, perhalo( $C_1$ - $C_6$ )alkoxy, phenoxy, ( $C_5$ - $C_{10}$ )heteroaryl-O-, ( $C_5$ - $C_{10}$ )heteroacyclic-O-, ( $C_3$ - $C_{10}$ )cycloalkyl-O-, ( $C_1$ - $C_6$ )alkyl- $SO_2$ -, ( $C_1$ - $C_6$ )alkyl- $SO_2$ -NH-, amino( $C_1$ - $C_6$ )alkyl- $C_1$ -, phenyl-( $C_1$ - $C_1$ -, phenyl-( $C_1$ - $C_1$ -) heteroacyclic-( $C_1$ - $C_1$ -), ( $C_1$ - $C_1$ - $C_1$ -) heteroacyclic-( $C_1$ - $C_1$ -), phenyl-( $C_1$ -), phenyl-(C

where alkyl, alkenyl, alkynyl, phenyl, heteroaryl, heterocyclic, cycloalkyl, alkoxy, phenoxy, amino of R<sup>3</sup> is optionally substituted by at least one substituent independently selected

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from  $(C_1-C_6)$ alkyl,  $(C_1-C_6)$ alkoxy, halo $(C_1-C_6)$ alkyl, halo,  $H_2N$ -,  $Ph(CH_2)_{1-6}HN$ -, and  $(C_1-C_6)$ alkylHN-;

s is an integer from one to five;

 $R^4$  is independently selected from the group consisting of: hydrogen, halo, halo( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkyl, ( $C_2$ - $C_6$ )alkenyl, ( $C_2$ - $C_6$ )alkynyl, perhalo( $C_1$ - $C_6$ )alkyl, phenyl, ( $C_5$ - $C_{10}$ )heteroaryl, ( $C_5$ - $C_{10}$ )heterocyclic, ( $C_3$ - $C_{10}$ )cycloalkyl, hydroxy, ( $C_1$ - $C_6$ )alkoxy, perhalo( $C_1$ - $C_6$ )alkoxy, phenoxy, ( $C_5$ - $C_{10}$ )heteroaryl-O-, ( $C_5$ - $C_{10}$ )heterocyclic-O-, ( $C_3$ - $C_{10}$ )cycloalkyl-O-, ( $C_1$ - $C_6$ )alkyl-S-, ( $C_1$ - $C_6$ )alkyl-SO<sub>2</sub>-, ( $C_1$ - $C_6$ )alkyl-NH-SO<sub>2</sub>-, O<sub>2</sub>N-, NC-, amino, Ph(CH<sub>2</sub>)<sub>1-6</sub>HN-, ( $C_1$ - $C_6$ )alkyl-HN-, ( $C_1$ - $C_6$ )alkyl-MH-SO<sub>2</sub>-, O<sub>2</sub>N-, NC-, amino, Ph(CH<sub>2</sub>)<sub>1-6</sub>HN-, amino(C=O)-, aminoO<sub>2</sub>S-, ( $C_1$ - $C_6$ )alkyl-(C=O)-NH-, ( $C_1$ - $C_6$ )alkyl-(C=O)-(( $C_1$ - $C_6$ )alkyl-NI-, phenyl-(C=O)-(( $C_1$ - $C_6$ )alkyl)-NI-, ( $C_1$ - $C_6$ )alkyl-(C=O)-, phenyl-(C=O)-, ( $C_5$ - $C_{10}$ )heteroaryl-(C=O)-, ( $C_5$ - $C_{10}$ )heterocyclic-(C=O)-, ( $C_3$ - $C_{10}$ )cycloalkyl-(C=O)-, ( $C_1$ - $C_6$ )alkyl)<sub>2</sub>-N-(C=O)-, phenyl-NH-(C=O)-, phenyl-(C=O)-, phenyl-(C=O)-, phenyl-(C=O)-, phenyl-(C=O)-, phenyl-(C=O)-, phenyl-(C=O)-, ( $C_3$ - $C_{10}$ )cycloalkyl-NH-(C=O)-, and ( $C_1$ - $C_6$ )alkyl-(C=O)-O-; ( $C_5$ - $C_{10}$ )heterocyclic-NH-(C=O)-, ( $C_3$ - $C_{10}$ )cycloalkyl-NH-(C=O)- and ( $C_1$ - $C_6$ )alkyl-(C=O)-O-;

where alkyl, alkenyl, alkynyl, phenyl, heteroaryl, heterocyclic, cycloalkyl, alkoxy, phenoxy, amino of  $\mathbb{R}^4$  is optionally substituted by at least one substituent independently selected from the group consisting of  $(C_1-C_6)$ alkyl,  $(C_1-C_6)$ alkoxy, halo $(C_1-C_6)$ alkyl, halo,  $H_2N_-$ ,  $Ph(CH_2)_{1-6}HN_-$ ,  $(C_1-C_6)$ alkyl $HN_-$ ,  $(C_5-C_{10})$ heteroaryl and  $(C_5-C_{10})$ heterocyclyl;

with the proviso that when R<sup>4</sup> is a substituted phenyl moiety, then (a) R<sup>1</sup> is not naphthyl, phenyl or anthracenyl and (b) if R<sup>1</sup> is a phenyl fused with an aromatic or non-aromatic cyclic ring of 5-7 members wherein said cyclic ring optionally contains up to three heteroatoms independently selected from N, O and S, then the fused cyclic ring of said R<sup>1</sup> moiety is substituted.

19. (currently amended) A compound selected from the groups consisting of 2-(4-Benzo[1,3]diexel 5 yl exazel 5-yl)-6-methyl pyridine;
4 [5 (6-Methyl-pyridin-2-yl) exazel 4 yl] quinoline;
1 Methyl-6-[5 (6-methyl-pyridin-2-yl) exazel-4-yl]-1H benzetriazele;
2 Methyl 5 [5 (6-methyl-pyridin-2-yl) exazel-4-yl]-2H benzetriazele;

- 6 [5 (6 Methyl pyridin 2 yl) oxazol 4 yl] quinoline;
- 6 [5 (6 Methyl pyridin 2 yl) exazol 4 yl] quinexaline;
- 2 [5 (6-Methyl-pyridin-2-yl)-oxazol-4-yl]-[1,5]naphthyridino;
- {4 {5 (6 Methyl pyridin 2 yl) exazel 4 yl] pyridin 2 yl} -phenyl-amine;
- 2-(4 Benzo[1,3]dioxol 5 yl 2 methyl exazel 5 yl) 6 methyl pyridine;
- 1-Methyl-6-[2-methyl-5-(6-methyl-pyridin-2-yl) exazel 4 yl] 1H benzetriazele;
- 2 Methyl 5 [2 methyl-5 (6-methyl-pyridin-2-yl) oxazol 4 yl] 2H benzotriazole;
- 6 [2 Methyl 5 (6 methyl pyridin 2 yl) oxazol 4-yl]-quinoline;
- 6 [2 Mothyl 5 (6 mothyl pyridin 2 yl) oxazol 4 yl] quinoxaline;
- 2-[2-Mothyl-5-(6-mothyl-pyridin-2-yl)-oxazol 4-yl]-[1,5]naphthyridine;
- {4 [2 Methyl-5 (6-methyl-pyridin-2-yl) oxazol-4-yl] pyridin 2 yl) phonyl-amino;
- 4 [2 Methyl 5 (6 methyl pyridin 2 yl) exazol 4 yl] quinoline;
- 4-Benzo[1,3]dioxol-5-yl-5-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 4-(3-Methyl-3H-benzotriazol-5-yl)-5-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 4-(2-Methyl-2H-benzotriazol-5-yl)-5-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;
- 5-(6-Methyl-pyridin-2-yl)-4-quinolin-6-yl-thiazol-2-ylamine;
- 5-(6-Methyl-pyridin-2-yl)-4-quinoxalin-6-yl-thiazol-2-ylamine;
- {4 [2 Amino 5 (6 methyl-pyridin 2 yl) thiazol 4 yl] pyridin 2 yl}-phenyl-amino:
- 1-Methyl-6-[5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-1H-benzotriazole;
- 2-Methyl-5-[5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-2H-benzotriazole;
- 2-(4-Benzo[1,3]dioxol-5-yl-thiazol-5-yl)-6-methyl-pyridine;
- 6-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoxaline;
- 2-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-[1,5]naphthyridine;
- {4 [5 (6 Methyl pyridin 2 yl)-thiazol-4-yl]-pyridin 2 yl}-phenyl-amino;
- 4-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline;
- 6-[5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline;
- 1-Methyl-6-[2-methyl-5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-1H-benzotriazole;
- 2-Methyl-5-[2-methyl-5-(6-methyl-pyridin-2-yl)-thiazol-4-yl]-2H-benzotriazole;
- 2-(4-Benzo[1,3]dioxol-5-yl-2-methyl-thiazol-5-yl)-6-methyl-pyridine;
- 6-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoxalino;

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- 2-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thia2ol-4-yl]-[1,5]naphthyridine;
- {4-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazel-1-yl]-pyridin 2-yl}-phenyl-amine;
- 4-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline; and
- 6-[2-methyl-5-(6-Methyl-pyridin-2-yl)-thiazol-4-yl]-quinoline; or a pharmaceutically acceptable salt thereof.

## 20. (canceled)

- 21. (currently amended) A compound selected from the groups consisting of
  - 1-Methyl-6-[4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-1H-benzotriazole;
  - 2-Methyl-5-[4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-2H-benzotriazole;
  - 2-(5-Benzo[1,3]dioxol-5-yl-thiazol-4-yl)-6-methyl-pyridine;
  - 6-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoxaline;
  - 2-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-[1,5]naphthyridine;
  - {4 [4 (6 Methyl pyridin 2 yl)-thiazol-5-yl]-pyridin 2 yl) phenyl amine:
  - 4-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline;
  - 6-[4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline;
  - 1-Methyl-6-[2-methyl-4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-1H-benzotriazole;
  - 2-Methyl-5-[2-methyl-4-(6-methyl-pyridin-2-yl)-thiazol-5-yl]-2H-benzotriazole;
  - 2-(5-Benzo[1,3]dioxol-5-yl-2-methyl-thiazol-4-yl)-6-methyl-pyridine;
  - 6-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoxaline;
  - 2-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-[1,5]naphthyridine;
  - {4 [2 methyl-4 (6-Methyl-pyridin-2-yl) thiazol 5 yl] pyridin-2-yl} phenyl amine;
  - 4-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline; and
- 6-[2-methyl-4-(6-Methyl-pyridin-2-yl)-thiazol-5-yl]-quinoline; or a pharmaceutically acceptable salt thereof.
- 22. (currently amended) A compound selected from the groups consisting of 5-(3-Methyl-3H-benzotriazol-5-yl)-4-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine; 5-(2-Methyl-2H-benzotriazol-5-yl)-4-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine;

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- 5-Benzo[1,3]dioxol-5-yl-4-(6-methyl-pyridin-2-yl)-thiazol-2-ylamine; and
- 4-(6-Methyl-pyridin-2-yl)-5-quinoxalin-6-yl-thiazol-2-ylamine; or a pharmaceutically acceptable salt thereof.